

Nits Separator

ABSTRACT

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A plant which serves to produce a nonwoven web of fibres (20) out of a fibrous material, such as cellulose pulp (6). The plant comprises a hammer mill (1) for defibrating the fibrous material and a forming head (2) for forming a web of fibres on an endless forming wire (3), which, during operation, runs mainly horizontally, a first transport fan (9) for transporting defibrated fibre to the forming head via a first air duct (10) and a second transport fan (22) to extract nits from the forming head via a second air duct (21). Furthermore, the plant comprises a separator (4), which is connected to the second air duct and arranged for separating the nits and the well-opened fibre, a third transport fan (23) for returning the separated, well-opened fibres to the forming head, and a nits-opener (5) for converting the separated nits into well-opened fibre. The separated nits are transported from the nits separator (4) to the nits-opener (5) by means of a fourth transport fan (25) via a fourth air duct (26). The defibrated fibres are returned to the forming head by means of a fifth transport fan (29) via a fifth air duct (27). The plant is easy to control and is capable of producing optimally high quality fibre products. In addition, the plant allows the defibrator to defibrate new fibre material at full capacity so that the remainder of the plant is able to produce at an optimum output level. The plant is furthermore very energy-saving.

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